

AMENDMENT TO THE DRAWINGS

Fig. 9 has been amended to reflect reference numeral 900. Accordingly, attached hereto is a "Annotated Sheet Showing Changes" made, as well as a "Replacement Sheet".

REMARKS

Reconsideration of the application is respectfully requested.

In this amendment, the claims have been amended to more particularly recite various embodiments of the invention, without introducing any new matter. Support for the amended language can be found in the Specification as filed, for example at paragraphs [00017], [00018] and [00020].

Before addressing the claim rejections, Applicants note that a replacement drawing sheet for **Fig. 9** is enclosed, bearing the missing reference number that has been pointed out in the Final Office Action. In addition, an antecedent basis problem in claim 6 regarding “the subnet representative” has been corrected here.

Claims Rejected Under 35 U.S.C. §102

Claims 1-10 and 21-26 stand rejected as being anticipated by U.S. Patent No. 5,361,256 issued to Doeringer, et al. (“Doeringer”). Applicants have amended claim 1 to clarify a distinction with respect to Doeringer, namely that claim 1 refers to a method for automatically establishing a discovered set of subnets as an alias domain, in a particular type of network environment. A server in this environment is connected to a router which is configured to not forward multicast traffic. The router is connected to a number of switches where each switch is connected to a number of subnets and is configured to forward multicast traffic. The method recites several operations that are performed by the server. Doeringer does not teach or suggest such operations performed by a server.

As to claim 6, this claim has been amended to recite a method where a set of subnets in which network elements will be targets of a multicast or broadcast job are enumerated. The set of subnets is established as an alias domain by a core server automatically performing a number of operations. These include sending a discovery message to a subnet representative of each of the subnets where the discovery message contains an identifier for the multicast or broadcast job. The server evaluates a response from a first subnet representative of a first subnet. If the response indicates that the sender’s subnet has an alias, then the server assigns the sender’s subnet to a domain

indicated by the response. Where the response indicates that the sender's subnet has no alias, then the server stores the sender's subnet address as a domain. Where the sender's subnet has no alias, the first subnet representative broadcasts or multicasts a notification message which includes the identifier and an address for the first subnet. This capability in the core server and in the subnet representative is not taught or suggested by Doeringer.

As to claim 11, this claim has also been amended to clarify the method for automatically establishing a set of subnets as an alias domain, by operations performed by a core server with respect to subnet representatives. This type of network environment is not taught or suggested in Doeringer which involves interaction between gateways to distribute routing information between them using update PDUs to update their forwarding information basis.

As to claim 21, this claim has also been amended to clarify that the instructions are to be executed by a server where the operations by the server involve dynamically establishing a set of subnets as an alias domain by sending to a representative in each subnet a message that includes the same multicast job identifier. The server receives the response from each subnet and indicates whether or not this identifier has been previously received by the representative. Doeringer does not teach or suggest such capability, even assuming just for the sake of argument that the group ID mentioned in Doeringer would refer to an alias domain or a subnet address.

Finally, turning now to claim 27, this claim has also been amended to clarify that the instructions are to cause the machine to perform operations for establishing automatically a set of subnets as an alias domain. The operations may be performed at a subnet representative that communicates with a server in receiving a message from the server that indicates a broadcast or multicast transmission job identifier. The machine determines whether it is in a domain for the transmission job, by checking a cache in the machine for the identifier. If the machine is not in the domain for the transmission job, then the machine transmits another message to the server indicating the machine's subnet and adds the identifier to its cache. On the other hand, if the machine is in the domain, then the message that is transmitted back to the server indicates the domain. In other words, the server is to interpret the message coming

from the machine indicating either the domain (which may be the address for another subnet that is in the domain) or the machine's own subnet which indicates the machine is not in the domain of the particular transmission job. Harvey does not teach or suggest such a capability for automatically establishing a discovered set of subnets as an alias domain.

In Harvey, a receiver utility routine at a client determines whether or not multicast data is to be streamed to it for the end user. Now, the routine does determine whether or not IP multicast capability is available within the particular network segment on which the client is running, as correctly noted in the Final Office Action referring to Harvey, col. 5, lines 22-33. However, Harvey does not teach the details recited in Applicants' claim 27, namely operations for establishing automatically a set of subnets as an alias domain.

Harvey merely refers to some test that is performed by the inventive receiver utility routine, but does not teach any interaction, for example, between the receiver utility routine and a server such as that recited in Applicants' claim 27. It is Applicants' understanding that attempts to broadcast or multicast data can be frustrated by network configurations that have been chosen by network administrators. A network administrator can often configure their routers and/or switches not to support broadcast or multicast, or they may limit the amount of support across their network because of the potential for broadcast and/or multicast storms. Applicants' claim 27 provides relief for that situation by automatically allowing a server to establish a set of subnets in such a network, as an alias domain for the purposes of a multicast or broadcast transmission job. This involves interaction between a server and subnet representatives as recited in Applicants' claims. In contrast, Harvey does not teach or suggest any particular methodology for allowing its receiver utility routine to participate in the process of establishing the alias domain for the multicast or broadcast job.

Any dependent claims not mentioned above are submitted as not being anticipated or obvious, for at least the same reasons given above in support of their base claims.

It should be noted that not all of the assertions made in the Office Action, particularly those with respect to the dependent claims, have been addressed here, in the interest of conciseness. Applicants reserve the right to challenge any of the assertions made in the Office Action by the Examiner, with respect to the relied upon art references and how they would relate to Applicants' claim language.


CONCLUSION

In sum, a good faith attempt has been made to explain why the rejection of the claims is improper, and how the claims are believed to be in condition for allowance. A Notice of Allowance referring to claims 1, 3-14, and 21-30, as amended here, is therefore respectfully requested to issue at the earliest possible date.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly, extension of time fees.

Respectfully submitted,
BLAKELY, SOKOLOFF, TAYLOR, & ZAFMAN LLP

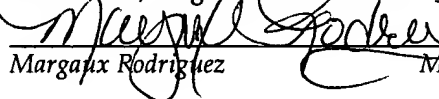
Dated: May 12, 2006

By 
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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, Post Office Box 1450, Alexandria, Virginia 22313-1450 on May 12, 2006.


Margaux Rodriguez May 12, 2006



"ANNOTATED SHEET SHOWING CHANGES"

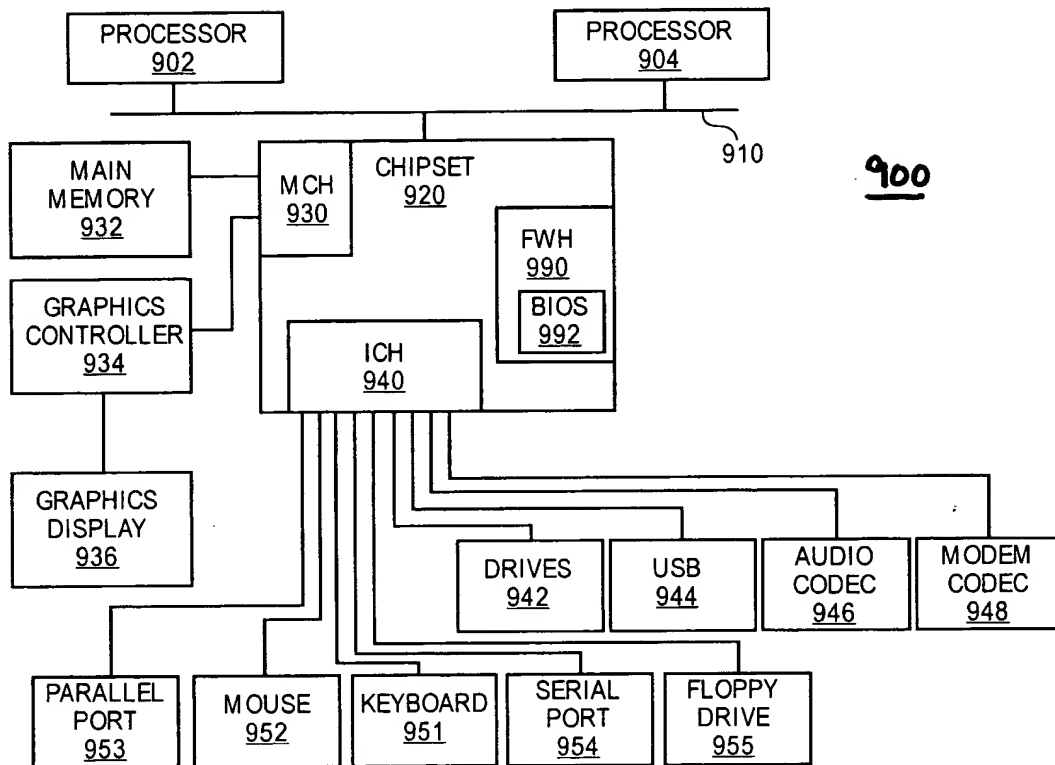


FIG. 9